REMARKS

Applicant is in receipt of the Office Action mailed May 27, 2008. Claims 1-40 are pending in the case. Reconsideration of the present case is earnestly requested in light of the following remarks.

Section 103 Rejections

Claims 1, 10, 19, and 28 (presumably 28 - 40) were rejected under 35 U.S.C. 103(a) as being unpatentable over Planas et al (US Patent 6,112,015, "Planas") in view of Glaser (US Patent 5,889,520).

Claim 1 recites:

1. A method comprising:

monitoring a plurality of application tiers, wherein said monitoring includes tracking one or more attributes associated with each of the application tiers, wherein the application tiers execute on one or more server computers, wherein said monitoring is performed by agent software executing on each of the one or more server computers;

displaying a plurality of objects each corresponding to a respective one of the application tiers;

in response to detecting a change in the one or more attributes associated with a given application tier, altering the appearance of the corresponding object to reflect said change.

Nowhere does the cited art teach or suggest **monitoring a plurality of application tiers, wherein said monitoring includes tracking one or more attributes associated with each of the application tiers, wherein the application tiers execute on one or more server computers, wherein said monitoring is performed by agent software executing on each of the one or more server computers**, as recited in claim 1.

As explained in the previous Response, which is hereby incorporated by reference, cited col.2:52-54, and Planas in general, is directed to monitoring and

management of individual network objects, i.e., network nodes, links, and cards (see, e.g., col.3:66-col.4:25). This text specifically describes a system for monitoring a telecommunications network consisting of these network objects. Note that Planas specifically excludes items such as databases, operating systems, terminals and printers from being considered telecommunications network objects. Nowhere does Planas teach or even hint at monitoring application tiers, nor tracking attributes associated with each of the application tiers, nor application tiers executing on one or more server computers. As also explained previously, examples of application tiers include, "web clients, web servers, networks, application servers, database servers, storage servers, etc." (see, e.g., paragraph [0015]). In other words, each of these application tiers includes a number of application components in that functional category, and monitoring is performed at the tier level, not just with respect to certain individual "network objects", as with Planas.

Similarly, cited col.2:63-67 discloses imparting attributes (selected from a set of possible attributes) to icons representing individual network objects, where each attribute represents a different predetermined base state of the respective network object. In other words, the attributes are for individual network nodes, links, and/or cards, *not* application tiers. Moreover, Planas never even mentions monitoring of any kind being performed by *agent software*, nor, more particularly, agent software executing on each of the one or more server computers.

The Office Action admits that Planas fails to teach or suggest monitoring *application tiers* (where an application tier comprises an entire class or category of devices) as claimed, but asserts that Glaser remedies these admitted deficiencies of Planas.

Before addressing the Office Action's arguments with respect to Glaser in combination with Planas, Applicant notes the following:

In the Response to Arguments, the Examiner disagrees with Applicant's assertion that "Planas fails to teach or suggest monitoring a plurality of application tiers, wherein said monitoring includes tracking one or more attributes associated with each of the application tiers". However, the Examiner clearly admitted on p.3 that "Planas does not explicitly teach monitoring application tiers..."

Additionally, in the Response to Arguments, the Examiner notes that "one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references". Applicant understands this point, and agrees. However, Applicant respectfully notes that to make a section 103 rejection, *all* claimed features must be disclosed by the combination of references. Applicant submits that there are numerous features of claim 1 that are not taught or suggested by the combination of Planas and Glaser, and that the Examiner has improperly glossed over, ignored, or incorrectly interpreted these features in a manner contrary to their accepted meanings. Applicant respectfully requests that the Examiner give each term in the claims its proper meaning and weight. Moreover, Applicant's arguments directed to individual references were made to particularly rebut the Examiner's assertions that the individual references disclose particular claims.

For example, Applicant respectfully notes that neither Planas nor Glaser teaches agent software at all, and more specifically fails to disclose agent software executing on each of one or more server computers to monitor application tiers, and so submits that these references together cannot teach agent software.

On p.3 the Examiner admits that Planas fails to disclose agent software as claimed, but asserts that Glaser remedies this deficiency.

Cited col.7:28-42 of Glaser is directed to a topological view of a multi-tier network, but fails to disclose software agents executing on server computers monitoring the application tiers.

Cited col. 4:48-67 describes a development environment for implementing the system of Glaser, specifically, a Rapid Application Development (RAD) tool for constructing client-server applications for a multi-tier computer network architecture, but fails to disclose software agents executing on server computers monitoring application tiers, as claimed.

The Examiner asserts equivalence between Glaser's Rapid Applicant Development (RAD) environment and software agents, which Applicant respectfully submits is technically incorrect. As is well known to those of skill in the software arts, an application development environment allows users to interactively develop and sometimes test/debug applications, while an agent is a type of software program that has

authority to act on its own to perform some functionality, i.e., on the part of an entity not present or otherwise unable or available to perform this functionality itself. Nowhere does Glaser indicate or even hint that the RAD environment as agent software, nor does Glaser describe the RAD environment in terms of agent-like functionality.

The Examiner attempts to justify this asserted equivalence, stating "Glaser RAD tool is additionally reasonable equivalent to software agents executing on server computers monitoring application tiers, because the RAD tool incorporates an Integrated Development Environment (IDE) that is used to design, develop, deploy, and debug computer programming. The RAD assists in data access, data manipulation and data rendering, all in which can be included in monitoring the application tiers [*sic*]". Applicant respectfully submits that software agents are characterized not by the particular functions they perform, but rather by the manner in which these functions are performed. As discussed above, nowhere does Glaser describe the RAD IDE as operating in the manner of a software agent. Nor does Glaser discuss or disclose agent software executing on each of one or more server computers monitoring application tiers executing on these server computers.

The Office Action states that "Monitoring of the application tiers is handled by a Rapid Application Development tool". Applicant respectfully notes that the fact that the RAD tool monitors objects comprised in tiers does not mean that the rapid application development tool is equivalent to software agents executing on server computers as claimed. In fact, Applicant notes that while Glaser discloses the RAD tool monitoring and displaying performance attributes for objects organized in tiers, but *not* at the tier level itself, as discussed below in more detail.

Cited col.8:38 – col.9:7 of Glaser discloses viewing a graphical representation of multi-tier network performance parameters, but again, fails to disclose software agents executing on server computers monitoring application tiers.

Applicant respectfully notes that Glaser is silent as to how the performance information is collected. For example, Applicant notes that Glaser's claims refer to "receiving a data structure containing performance information", but do not recite how this data structure is populated. The only other mention Glaser makes regarding the source of the performance information is in col.8:60-62, which reads: "The performance

information is obtained from the network manager, database manager(s), and/or web manager(s)". Again, nowhere does Glaser indicate that any of these functions are performed by agent software as claimed.

Additionally, Applicant respectfully notes that there is a difference between monitoring performance of a multi-tier network by monitoring the individual objects in the tiers, as taught by Glaser and Planas, and monitoring the tiers as entities in themselves, as per Applicant's claim 1.

Thus, for at least the above reasons, the cited art of Planas and Glaser, taken singly or in combination, fails to disclose these features of claim 1.

The cited art of Planas and Glaser also does not teach or suggest **displaying a plurality of objects each corresponding to a respective one of the application tiers**, as recited in claim 1. As noted above, Planas is directed to individual network objects, and does not teach or suggest objects that each "correspond[ing] to a respective one of the application tiers. For example, the cited portion of Planas at col. 2, lines 26 – 28 refers to displaying icons for individual network objects, NOT application tiers, e.g., an entire category of devices. Applicant submits that performing monitoring and display of entire application tiers is very different than the operations performed on individual network objects as taught in Planas. Additionally, Applicant notes, and the Examiner has admitted, that Planas fails to teach application tiers at all, and so Planas does not, and cannot, teach displaying objects that respectively correspond to or represent application tiers.

The Examiner argues that Glaser discloses this feature, citing col.8:38 – col.9:7 and Figure 6. Applicant notes that per the citation, Figure 6

> …illustrates a graphical display of the topographical view for one embodiment of the present invention. The display window 600 comprises three portions; a first portion 602 representing HTML sites, a second portion 604 is for tier-2 applications, and a third portion 606 represents the tier-3 databases. In this illustration, first portion 602 of the topology display window 600 is designated to tier-2 as HTML sites and the application files 454 are visually represented as HTML icons 608 and alphanumeric labels 620 within first portion 602. HTML icon 610 within first portion 602 comprises a hierarchical or other display of a project and its

> components stored in the application file 454. The application files 454 may include, but are not limited to: HTML pages, stored procedures, user-defined functions, and database queries.

In the Response to Arguments, the Examiner asserts that Figure 6 "provides visual and graphical representations of objects (app files), which provides a visual indication on the performance of the application tiers [*sic*]". However, Applicant respectfully notes that the cited "representations of objects (app files)", *represent individual objects within tiers*, and in no way represent the respective tiers themselves. In the Response to Arguments, the Examiner appears to argue that since Glaser's display in Figure 6 demarcates tiers of objects by vertical lines separating the individual objects in each tier from those in the other tiers, that this somehow discloses displaying a plurality of *objects each corresponding to a respective one of the application tiers*, which Applicant respectfully submits one or skill in the graphical user interface arts would readily understand is *not* the case. Nowhere does Glaser (nor Planas) teach or suggest displaying objects or icons *that each represents a respective application tier.* In other words, the partitioned portions of Glaser's display corresponding to tiers are not *displayed objects*. If the Examiner believes that the term "objects" in this clause is confusing, Applicant suggests replacing this term with "icon".

Thus, for at least the above reasons, Applicant submits that the cited art of Planas and Glaser, taken singly or in combination, fails to disclose these features of claim 1.

Nor does the cited art disclose **in response to detecting a change in the one or more attributes associated with a given application tier, altering the appearance of the corresponding object to reflect said change**, as recited in claim 1.

Cited col.8:17-25, and Figure 20 of Planas disclose icons representing network objects that represent states of the network objects. As noted above, these icons represent states of individual network objects, e.g., network nodes, links, and cards, *not* application tiers (entire categories of devices), and so Planas fails to disclose this feature.

Nor does Glaser disclose this feature, at least for the reason that Glaser fails to disclose objects/icons that each represents a respective application tier. For example, as noted above, cited col.8:38 – col.9:7 discloses viewing a graphical representation of

multi-tier network performance parameters. Applicant notes that while Glaser does mention tier icons, which refer to icons within a tier, being expanded to display their constituent hierarchies, e.g., expanding an HTML site to show all the web-pages of that site (col.8:15-37), and further describes displaying performance information in a GUI, specifically, in a designated portion of the topology display window, nowhere does Glaser describe or illustrate altering the appearance of an object representing an application tier to reflect a change in an attribute of the application tier.

Rather, in the cited text, Glaser describes displaying links in such a way as to indicate performance information:

> For example, values for network or database(s) performance can be displayed next to the related data paths 618, or animated symbols (for instance, dashed lines 626) may be visually displayed to represent movement of application files and data across different tiers or between application files within a tier. The rate that these animated symbols move along the data paths (solid lines 618), their colors, or their thicknesses may vary according to the performance and data transfer rate of the network.

Nowhere does the cited text, or Glaser in general, disclose modifying the appearance of an object or icon that represents a respective tier to reflect a change in an attribute of the tier.

More generally, Applicant respectfully submits that both Glaser and Planas monitor and graphically display individual objects, but not at the level of application tiers claimed. The fact that Glaser organizes these individual objects into tiers on a display is in no way equivalent to displaying objects that represent the respective tiers themselves. The Examiner appears to argue that since Glaser monitors a multi-tier network, that the manner in which Glaser does this must somehow be equivalent to Applicant's claimed techniques. This is technically incorrect, and improper. Applicant respectfully notes that the various particular means and methods used to perform some functionality can be patentably distinct, as the Examiner is certainly aware, and that Planas's and Glaser's techniques, taken singly or in combination, in no way disclose all the features and limitations of claim 1. The fact that neither Planas nor Glaser discloses objects or icons that represent respective application tiers, nor altering the appearance of such objects (icons) in response to detecting a change in the one or more attributes associated with a

given application tier, clearly indicates that these references cannot disclose these features in combination. Applicant respectfully submits that it is improper for the Examiner to insert these missing elements absent any teaching from the references.

For example, in the Response to Arguments, the Examiner argues that since Planas discloses "monitoring network cakes by attributes associated with the network objects", and Glaser teaches "monitoring a multi-tier network", and "taking into consideration the ability to monitor application tiers by representing them as icons as that of Glaser in addition to using additional attributes associated with the icons as that of Planas, provides for the teaching of the above limitation". However, Applicant notes that "the ability to monitor application tiers by representing them as icons" is not actually disclosed by Glaser, as explained at length above.

More specifically, the Examiner argues that "while Planas may teach just network objects, it is the combination of Planas and Glaser that teaches the above limitation. Applicant appears to be arguing that the present invention only displays one icon (a tier icon) as the visual representation of the tiers. However the current claim language only requires representation of tiers which is shown by Glaser by the separation of the tiers in figure 6". Applicant respectfully notes that the Examiner's characterization of claim 1 is incorrect. Claim 1 clearly recites "displaying a plurality of **objects each corresponding to a respective one of the application tiers**" (*emphasis added*). Nowhere does Glaser (nor Planas) disclose such objects. Thus, Glaser does not, and cannot, provide this feature in the alleged combination.

Thus, Applicant submits that the cited art fails to teach or suggest these features of claim 1.

Moreover, Applicant submits that a proper motivation to combine these references has not been provided. For example, Applicant notes that the suggested motivation: "to provide detailed, easily conveyed, simplified view of the network connectivity, activities, and performance to a user", is simply a statement of presumed benefit of Applicant's invention as represented in claim 1, and is so broad as to be applicable to virtually any innovation regarding visualization of network systems. Nowhere do Planas or Glaser indicate or even hint at the desirability of the particular

combination of features and limitations recited in claim 1. Thus, Applicant submits that, lacking a proper motivation to combine, Planas and Glaser are not properly combinable to make a prima facie case of obviousness.

Moreover, even were Planas and Glaser properly combinable, which Applicant argues they are not, the resulting combination would still not produce Applicant's claimed invention, as explained at length above.

Thus, for at least the reasons provided above, Applicant submits that claim 1, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Independent claims 10, 19, and 28, include similar limitations as claim 1, and so the above arguments apply with equal force to these claims. Thus, for at least the reasons provided above, Applicant submits that claims 10, 19, and 28, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Applicant also asserts that numerous ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

Applicant thus respectfully requests removal of the section 103 rejection of claims 10, 19, and 28 (- 40).

Claims 2-4, 6, 7, 11-13, 15, 16, 20-22, 24, and 25 stood rejected under U.S.C. 103(a) as being unpatentable over Planas, in view of Glaser, and further in view of Enchanted Learning (Graphic Organizers, web page).

Claims 9, 18, and 27 stood rejected under U.S.C. 103(a) as being unpatentable over Planas, in view of Glaser, and further in view of McMillian, et al (US Patent 5,926,176, "McMillian").

Claims 5, 14, and 23 stood rejected under U.S.C. 103(a) as being unpatentable over McMillian, in view of Glaser, and further as modified by Enchanted Learning.

Claims 8, 17, and 26 stood rejected under U.S.C. 103(a) as being unpatentable

over McMillian, et al as modified by Enchanted Learning.

Applicant submits that since the base claims for the dependent claims rejected under section 103(a) have been shown above to be patentably distinct and non-obvious, their respective dependent claims are similarly patentably distinct and non-obvious, and thus allowable.

Moreover, Applicant asserts that numerous ones of the dependent claims recite further distinctions over the cited art.

For example, regarding claims 7, 16, and 25, nowhere does the cited art teach or suggest **wherein each of the plurality of indicators corresponds to a different attribute of the application tier**.

The Office Action admits that Planas fails to teach or suggest "wherein each of the plurality of indicators corresponds to a different attribute of the network objects", but asserts that Enchanted Learning remedies this admitted deficiency of Planas.

Applicant respectfully notes that an "attribute of the network objects" is not the same as an *attribute of an application tier*, which Planas also fails to teach or suggest. Nor does Enchanted Learning, which is directed to the static display of information, teach or suggest displaying indicators corresponding to *attributes of an application tier*.

In the Response to Arguments, the Examiner argues that combining Glaser's tiers with Enchanted Learning's display of data somehow teaches displaying indicators that correspond to different attributes of an application tier. Again, Applicant submits that the Examiner is improperly inserting features that are not actually disclosed in any of the references. For example, nowhere has the Examiner indicated where Glaser discloses an attribute of a tier (as opposed to an attribute of an object in a tier). Applicant respectfully requests that the Examiner particularly point out and explain where each feature or limitation may be found in the alleged combination.

Thus, the cited art fails to teach or suggest the limitations of claims 7, 16, and 25, and so claims 7, 16, and 25, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

As another example, nowhere does the cited art disclose **wherein each of the one or more of objects is connected by a directional arrow, wherein the directional**

arrow represents the data flow between the plurality of application tiers, as recited in claims 9, 18, and 27.

The Office Admits that Planas and Glaser fail to disclose directional arrows connecting objects representing application tiers where the arrows represent data flow between the application tiers, but then asserts that McMillan remedies this admitted deficiency, citing McMillan's flowcharts that include directional arrows (col.1:39-49), and asserting that these arrows represent data flow. Applicant respectfully submits that per McMillan, these arrows represent control or logic flow, not data flow, and so McMillan fails to provide this feature.

In the Response to Arguments, the Examiner argues that "the mere use of the arrow to show informational flow would provide one the knowledge of data flow following the direction of the arrows. Also directional arrows are stated in the Office Action dated 11/26/2007 are well known to one skilled in the art to show information flow". Applicant respectfully notes that Applicant is not attempting to patent directional arrows that indicate data flow themselves, but rather the novel use of such arrows in an application performance monitoring system. The Examiner has provided no evidence that the prior art discloses *using directional arrows to represent data flow between application tiers*. The fact that the Examiner readily understands the utility of this novel technique is not germane to the patentability of the technique.

Thus, the cited art fails to teach or suggest the limitations of claims 9, 18, and 27, and so claims 9, 18, and 27, and those claims respectively dependent therefrom, are patentably distinct and non-obvious over the cited art, and are thus allowable.

Moreover, Applicant asserts that numerous other ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

Applicant thus respectfully requests removal of the section 103 rejection of the dependent claims.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above-referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel P.C., Deposit Account No. 50-1505/5760-14500/JCH.

Also filed herewith are the following items:

☐ Request for Continued Examination

☐ Terminal Disclaimer

☐ Power of Attorney By Assignee and Revocation of Previous Powers

☐ Notice of Change of Address

☐ Other:

Respectfully submitted,

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